



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,429	10/29/2003	Bogdan Kowalczyk	47171-00408USPT	7741
41230	7590	06/01/2006	EXAMINER	
CUMMINS-ALLISON CORP. C/O JENKENS & GILCHRIST 225 WEST WASHINGTON STREET, SUITE 2600 CHICAGO, IL 60606			BEAUCHAINE, MARK J	
			ART UNIT	PAPER NUMBER
			3653	

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/697,429	KOWALCZYK ET AL.	
	Examiner	Art Unit	
	Mark J. Beauchaine	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/24/04 & 4/23/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The Applicant's Information Disclosure Statements filed on 24 February 2004 and 23 April 2004 are acknowledged.

With respect to the requirement for copies of submitted documents, the U.S. patent and published patent applications cited on the IDS noted above have been considered, as submission of copies of these documents is no longer required. The non-patent literature and foreign documents now submitted and cited on the above IDS were also considered.

Note that not all the documents listed on the PTO-1449 form have been received and the missing and non-English language documents have been lined out on the attached PTO-1449. Furthermore, item A23 of the 24 February 2004 submittal has been lined through as it is redundant to item A22 of the same IDS.

Should the Applicant provide documentary evidence (such as a petition decision) of a waiver of the 37 CFR 1.98(a) requirement for submission of copies of these documents, they will be considered to the extent that they can be readily accessed by the Examiner.

Art Unit: 3653

The Applicant's attention is directed to MPEP 2004, which provides assistance to Applicants in complying with the duty of disclosure. In particular, item 13 states:

It is desirable to avoid the submission of long lists of documents if it can be avoided. Eliminate clearly irrelevant and marginally pertinent cumulative information. If a long list is submitted, highlight those documents which have been specifically brought to applicant's attention and/or are known to be of most significance. See *Penn Yan Boats, inc. v. Sea Lark Boats, Inc.*, 359 F. Supp. 948, 175 USPQ 260 (S.D. Fla. 1972), *aff'd*, 479 F.2d 1338, 178 USPQ 577(5th Cir. 1973), *cert. denied*, 414 U.S. 874 (1974). But cf. *Molins PLC v. Textron Inc.*, 48 F. 3d 1172, 33 USPQ2d 1823 (Fed. Cir. 1995).

While compliance with these guidelines is not mandatory, and there is no requirement to explain the materiality of cited references, the cloaking of a clearly relevant reference by inclusion in a long list of citations may not comply with an applicant's duty of disclosure, see *Penn Yan Boats, Inc. v. Sea Lark Boats, Inc.*, *supra*.

Regarding the IDS submitted 24 February 2004, the Examiner notes that of the 6 pages of references submitted by the Applicant no reference to a lubricant was found in any of the references. Furthermore, the Examiner considers the solid lubricant of the Applicant's independent claims 1, 7, 13 and 16 to be relevant to a prior art submittal. The Applicant is requested to state whether it is aware of any reference to a solid lubricant in any of the prior art provided.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3653

The term "about" in claims 3 (line 2), 4 (line 2), 9 (line 2) and 10 (line 2) is a relative term which renders the claim indefinite. The term "about" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Patent Number 5,370,575 by Geib et al (hereinafter "Geib"). The coin sorting apparatus disclosed by Geib incorporates sorting head 12, rotatable disc 13 and selecting means 42 that read on the Applicant's rotatable disc, stationary head and shaped regions, respectively. Geib further discloses a solid lubricant being disposed on the lower surface of the sorting head (Abstract and column 1, lines 52-57) that reads on the Applicant's solid lubricant.

Regarding claim 13, Geib discloses hopper 10 to receive coins, coins conveyed by resilient pad 16 and coins contacting the lower surface of sorting head 12 that read on the Applicant's steps of receiving coins, imparting motion to coins and engaging coins, respectively.

Art Unit: 3653

Regarding claims 14 and 15, Geib discloses ejecting coins by denomination via exit means 27-32 that reads on the Applicant's sorting and discharging steps, respectively.

Regarding claim 16, the sorting head 12, dimples (column 1, line 54) and lubricant (Abstract and column 1, line 55) provided by Geib read on the Applicant's steps of providing a disc-shaped object, machining shaped regions and depositing solid lubricant, respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 8, 9, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geib in view of Friction Reduction . . . publication, dated July 2002 (item C1 of Applicant's IDS submittal dated 23 April 2004) (hereinafter "Friction publication").

Regarding claims 2, 8 and 19, although Geib fails to disclose the solid lubricant of tungsten disulphide the use of such lubrication material is well known in the art. The Friction publication teaches such a lubricant (page 56, column 1, lines 4 and 5) that reads on the Applicant's lubricant.

Regarding claims 3 and 9, said Friction publication further teaches said lubricant having an "applied thickness of only one micron thick" (page 56, column 1, lines 4-6).

Art Unit: 3653

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the tungsten disulphide lubricant of the Friction publication into the coin apparatus of Geib to provide an effective coin lubrication means.

Regarding claim 20, the sizing of detail features of a substrate for a solid lubricant is well known in the art and the dimples of Geib are formed at a size appropriate for a particular lubricant. It would have been obvious to one of ordinary skill in the art at the time the invention was made to size the dimples of Geib to accommodate the tungsten disulphide particles of Friction publication to provide an effective means of positioning said particles to the substrate. Said sizing reads on the Applicant's dimple sizing.

Claims 4-6, 10-12, 17, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geib.

Regarding claims 4 and 10, since it is well known in the art to apply lubricants to substrates at various thicknesses it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the solid lubricant of Geib at a thickness of less than one micron to provide an effective means of lubrication.

Regarding claims 5, 6, 11 and 12, the use of 4140 Alloy prehard steel and Nitralloy 135 steel is well known in the art and it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such materials into the apparatus of Geib to provide structurally sound components.

Regarding claims 17 and 21, the act of polishing a surface which required low friction is well known in the art. It would have been obvious to one of ordinary skill in

Art Unit: 3653

the art at the time the invention was made to polish the lower surface of the sorting head 12 of Geib both before and after the lubricant were applied to enhance the lubrication of the surface.

Regarding claim 18, the process of subjecting a machined component to a nitride and heat treatment process is well known in the art and it would have been obvious to one of ordinary skill in the art at the time the invention was made to subject the sorting head 12 of Geib to such a process to enhance the performance characteristics of the component.

Conclusion

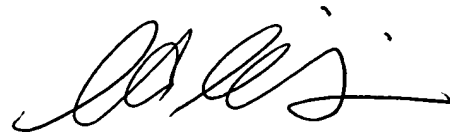
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark J. Beauchaine whose telephone number is (571)272-6934. The examiner can normally be reached on 8:00AM through 5:00PM Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571)272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3653

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mjb



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600